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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,315	08/10/2001	Takashi Hiraga	110345	8495
25944	7590	12/19/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			GRAY, JILL M	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/913,315

Applicant(s)

HIRAGA ET AL.

Examiner

Jill M. Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,13-15,17,19,20,22,24,25,40-50 and 53-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-10,13-15,17,19,20,22,24 and 25 is/are allowed.
- 6) ☒ Claim(s) 40-50 is/are rejected.
- 7) ☒ Claim(s) 53-57 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/7/05, 9/3/04.
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 28, 2005 has been entered.

### ***Response to Amendment***

The rejection of claims 1, 3-10, 13, 17, 46-50, and 53-57 under 35 U.S.C. 103(a) as being unpatentable over Chauffoureaux, 3,783,011 is withdrawn in view of applicants' arguments.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

### ***Claim Rejections - 35 USC § 103***

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 40-42 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tsujita et al, 6,355,311 B1 (Tsujita).

Claims 40-42 are product-by-process claims. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Tsujita teaches molded resin articles wherein the surface layer is modified with an organic compound having sublimation properties, said organic compound being selected from fluorescent dyes, photochromic dyes and UV absorbing dyes, as required by claims 40-42. See abstract and column 6, lines 7-43. Hence, the teachings of Tsujita anticipate the invention as claimed in present claims 40-42. In the alternative, the lack of physical description of the molded resin articles of claims 40-42 results in a product that reasonably appears to be either identical with or only slightly different than the prior art products. Accordingly, the teachings of Tsujita would have provided motivation to the skilled artisan at the time the invention was made to form molded resin

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articles having the surface modified with either a fluorescent dye or photochromic dye or organic metal compound that provides ray absorption.

Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product.

5. Claims 43 and 44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Oka et al, 5,516,519 (Oka).

Claims 43 and 44 are product-by-process claims. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Oka teaches an antibacterial and antiviral composition that can be applied to a resin molded product wherein the antibacterial and antiviral compounds have sublimation properties. See column 1, lines 55-58 and column 5, line 41-58. Hence, the teachings of Oka would have anticipated the invention as claimed in present claims 43 and 44. In the alternative, the lack of physical description of the molded resin articles of claims 43 and 44 results in a product that reasonably appears to be either

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identical with or only slightly different than the prior art products. The examples of Oka disclose mixing the antibacterial and antiviral compounds with resinous materials. This process necessarily results in a surface layer that has been modified with an antibacterial or medicinal activity organic compound. Therefore, the teachings of Oka would have provided motivation to the skilled artisan to form a resin molded article having the surface modified with either an antibacterial agent or medicinal activity compound.

Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product.

6. Claim 45 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yaffe et al, (Yaffe) 3,274,052.

Claim 45 is a product-by-process claim. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Yaffe teaches pesticide granules comprising a core material such as plastic beads which are coated with a pesticide which can have sublimation properties, or more specifically, a resin article wherein its surface layer is modified with an organic compound having sublimation properties that function as an agricultural chemical agent. See column 3, lines 41 and 53 and column 4, lines 53-54. Therefore, Yaffe anticipates the invention as claimed in present claim 45. In the alternative, the lack of physical description of the molded resin articles of claim 45 results in a product that reasonably appears to be either identical with or only slightly different than the prior art products. Hence, the teachings of Yaffe would have provided motivation to the skilled artisan for forming a molded resin article wherein its surface layer is modified with an organic compound having sublimation properties to impart a function as an agricultural chemical.

Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product.

### ***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 45-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, in claim 45, the language of “assuming a physiological activity to an animal/plant, by the modification method of the resin surface layer according to claim 1 to impart a function as an agricultural chemical to a surface layer” is vague and indefinite because the organic compound not clearly defined and, it is not clear if the modification method “assumes” physiological activity, and if so, how said assumption occurs. Also, it is unclear if the “physiological activity” is a property of the organic compound. In addition, the “function as an agricultural chemical to a surface layer” does not clearly identify the function to be imparted because agricultural chemicals include a plethora of different types of chemicals and functions such as herbicides, pesticides, and growth stimulates. Accordingly, the metes and bounds for which patent protection is being sought are not clear.

In claims 46-50, the language of “allow the deposited organic compound to penetrate/disperse for the surface of the molded resin article” is indefinite because it is not clear as to how the organic compound penetrates or disperses for the surface.

Also in claim 47 is indefinite because the temperature of the molded resin article being higher than a glass transition temperature or the resin is vague and does not clearly define the temperature of the article.

The Declaration under 37 CFR 1.132 filed September 20, 2005 is insufficient to overcome the rejection of claims 40-45 based upon the newly cited prior art because



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the declaration does not provide evidence establishing an unobvious difference between the claimed products and the prior art products of Tsujita, Oka and Yaffe.


***Allowable Subject Matter***

9. Claims 1, 3-10, 13-15, 17, 19-20, 22, and 24-25 are allowed.
10. Claims 53-57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jill M. Gray  
Primary Examiner  
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